AMENDMENTS TO THE CLAIMS

Claims 1 to 23 (Cancel)

24. (New) A phosphor of SiC excited by an external light source for emitting light, doped with N and at least one of B and Al.

25. (New) The phosphor of Sic according to claim 24, wherein both of the doping concentration with at least one of B and Al and the doping concentration with N are $10^{15}/cm^3$ to $10^{20}/cm^3$.

26. (New) The phosphor of SiC according to claim 25, wherein both of the doping concentration with at least one of B and Al and the doping concentration with N are $10^{16}/cm^3$ to $10^{20}/cm^3$.

27. (New) The phosphor of SiC according to claim 24, emitting fluorescence having a wavelength of 500 nm to 750 nm with a peak wavelength in the range of 500 nm to 650 nm.

28. (New) The phosphor of SiC according to claim 27, wherein SiC is doped with N and B, the concentration of either N or B is $10^{15}/cm^3$ to $10^{18}/cm^3$, and the concentration of either B or N is $10^{16}/cm^3$ to $10^{19}/cm^3$.

29. (New) The phosphor of SiC according to claim 24, emitting fluorescence having a wavelength of 400 nm to 750 nm with a peak wavelength in the range of 400 nm to 550 nm.

30. (New) The phosphor of SiC according to claim 29, wherein SiC is doped with N and Al, the concentration of either N or Al is $10^{15}/cm^3$ to $10^{18}/cm^3$, and the concentration of either Al or N is $10^{16}/cm^3$ to $10^{19}/cm^3$.

31. (New) A method of manufacturing a phosphor of SiC excited by an external light source for emitting fluorescence having a wavelength of 500 nm to 750 nm with a peak wavelength in the range of 500 nm to 650 nm and doped with N and B so that the concentration of either N or B is $10^{15}/cm^3$ to $10^{18}/cm^3$ and the concentration of either B or N is $10^{16}/cm^3$ to $10^{19}/cm^3$,

by forming an SiC crystal by sublimation recrystallization with a B source of LaB_6, B_4C, TaB_2, NbB_2, ZrB_2, HfB_2, BN or carbon containing B.

32. (New) The method of manufacturing a phosphor of SiC according to claim 31, performing thermal annealing at a temperature of at least 1300°C for at least one hour after sublimation recrystallization or thermal diffusion.

33. (New) A method of manufacturing a phosphor of SiC excited by an external light source for emitting fluorescence having a wavelength of 500 nm to 750 nm with a peak wavelength in the range of 500 nm to 650 nm and doped with N and B so that the concentration of either N or B is $10^{15}/cm^3$ to $10^{18}/cm^3$ and the concentration of either B or N is $10^{16}/cm^3$ to $10^{19}/cm^3$,

by thermally diffusing a B source of simple B, LaB_6, B_4C, TaB_2, NbB_2, ZrB_2, HfB_2 or BN into SiC under a vacuum or an inert gas atmosphere at a temperature of at least 1500°C.

34. (New) The method of manufacturing a phosphor of SiC according to claim 33, performing thermal annealing at a temperature of at least 1300°C for at least one hour after sublimation recrystallization or thermal diffusion.

35. (New) The method of manufacturing a phosphor of SiC according to claim 33, removing a surface layer after thermal diffusion.

36. (New) A substrate for a semiconductor consisting of a 6H-SiC single-crystalline phosphor excited by an external light source for emitting light and doped with N and at least one of B and Al.

37. (New) The substrate for a semiconductor according to claim 36, consisting of a 6H-SiC single-crystalline phosphor doped with N and B for emitting fluorescence having a wavelength of 500 nm to 750 nm with a peak wavelength in the range of 500 nm to 650 nm.

38. (New) The substrate for a semiconductor according to claim 36, consisting of a 6H-SiC single-crystalline phosphor doped with N and Al for emitting fluorescence having a wavelength of 400 nm to 750 nm with a peak wavelength in the range of 400 nm to 550 nm.

39. (New) A method of manufacturing a substrate for a semiconductor consisting of a 6H-SiC single-crystalline phosphor excited by an external light source for emitting fluorescence having a wavelength of 500 nm to 750 nm with a peak wavelength in the range of 500 nm to 650 nm and doped with N and B so that the concentration of either N or B is $10^{15}/cm^3$ to $10^{18}/cm^3$ and the concentration of either B or N is $10^{16}/cm^3$ to $10^{19}/cm^3$, comprising the steps of:

thermally diffusing a B source of simple B, LaB_6, B_4C, TaB_2, NbB_2, ZrB_2, HfB_2 or BN into SiC under a vacuum or an inert gas atmosphere at a temperature of at least 1500°C; and

removing a surface layer.

40. (New) The method of manufacturing a substrate for a semiconductor according to claim 39, performing thermal annealing at a temperature of at least 1300°C after sublimation recrystallization or thermal diffusion.

41. (New) A method of manufacturing a substrate for a semiconductor consisting of a 6H-SiC single-crystalline phosphor excited by an external light source for emitting fluorescence having a wavelength of 500 nm to 750 nm with a peak wavelength in the range of 500 nm to 650

nm and doped with N and B so that the concentration of either N or B is $10^{15}/cm^3$ to $10^{18}/cm^3$ and the concentration of either B or N is $10^{16}/cm^3$ to $10^{19}/cm^3$, wherein

atmosphere gas in crystal growth contains N_2 gas of 1 % to 30 % in gas partial pressure, and raw material SiC contains 0.05 mol % to 15 mol % of a B source, and an SiC crystal is formed by sublimation recrystallization.

42. (New) The method of manufacturing a substrate for a semiconductor according to claim 41, performing thermal annealing at a temperature of at least 1300°C after sublimation recrystallization or thermal diffusion.

43. (New) Powder for a semiconductor consisting of a 6H-SiC single-crystalline phosphor excited by an external light source for emitting fluorescence having a wavelength of 500 nm to 750 nm with a peak wavelength in the range of 500 nm to 650 nm, having a particle diameter of 2 μm to 10 μm and a central particle diameter of 3 μm to 6 μm.

44. (New) A light-emitting diode comprising a substrate for a semiconductor consisting of a 6H-SiC single-crystalline phosphor doped with N and at least one of B and Al and a light-emitting device of a nitride semiconductor formed on said substrate.

45. (New) The light-emitting diode according to claim 44, wherein

the emission wavelength of said light-emitting device of a nitride semiconductor is not more than 408 nm.

46. (New) The light-emitting diode according to claim 44, wherein

both of the doping concentration with at least one of B and Al and the doping concentration with N in said 6H-SiC single-crystalline phosphor are $10^{16}/cm^3$ to $10^{19}/cm^3$.

47. (New) The light-emitting diode according to claim 46, wherein

both of the doping concentration with at least one of B and Al and the doping concentration with N in said 6H-SiC single-crystalline phosphor are $10^{17}/cm^3$ to $10^{19}/cm^3$.

48. (New) A light-emitting diode having one or at least two layers consisting of a 6H-SiC single-crystalline phosphor doped with N and at least one of B and Al on a substrate of SiC for a semiconductor and comprising a light-emitting device of a nitride semiconductor on said 6H-SiC single-crystalline phosphor layer(s).

49. (New) The light-emitting diode according to claim 48, wherein

the emission wavelength of said light-emitting device of a nitride semiconductor is not more than 408 nm.

50. (New) The light-emitting diode according to claim 48, wherein

both of the doping concentration with at least one of B and Al and the doping concentration with N in said 6H-SiC single-crystalline phosphor are $10^{16}/cm^3$ to $10^{19}/cm^3$.

51. (New) The light-emitting diode according to claim 50, wherein

both of the doping concentration with at least one of B and Al and the doping concentration with N in said 6H-SiC single-crystalline phosphor are $10^{17}/cm^3$ to $10^{19}/cm^3$.